

MINI STEPPER

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a mini stepper, and more particularly to a mini stepper that is supported on the ground rigidly and stably, thereby facilitating the user operating the mini stepper.

2. Description of the Related Art

A conventional mini stepper in accordance with the prior art shown in Fig. 6 comprises a substantially H-shaped support frame 30 having two support rods 32 each supported by two stands 36 and a crossbar 34 mounted between the two support rods 32, a shaft tube 40 having a first end secured on the support frame 30, two pedals 42 each having a first end pivotally mounted on a second end of the shaft tube 40, and two hydraulic mechanisms 44 each having a first end pivotally mounted on the support frame 30 and a second end pivotally mounted on a second end of a respective one of the two pedals 42.

However, the crossbar 34 is combined with the two support rods 32 by soldering, thereby decreasing the aesthetic quality of the mini stepper, and thereby increasing the procedure of fabrication. In addition, the mini stepper is supported by the four stands 36 only, so that the mini stepper has a smaller contact area with the ground. Thus, the mini stepper is not supported on the ground rigidly and stably, thereby causing inconvenience to the user when operating the mini stepper. Further, the mini stepper has a smaller contact area

with the ground, so that the weight of the user is entirely concentrated on the mini stepper, thereby decreasing the lifetime of the mini stepper.

SUMMARY OF THE INVENTION

The primary objective of the present invention is to provide a mini
5 stepper, wherein the extension of the support rack is extended outward from
the mounting portion of the support rack in an oblique downward manner, and
each of the two stands of the support member is extended outward from the
mounting portion of the support member in an oblique downward manner,
thereby increasing the contact area of the mini stepper with the ground, so that
10 the mini stepper is supported on the ground rigidly and stably, thereby
facilitating the user operating the mini stepper.

Another objective of the present invention is to provide a mini
stepper, wherein the mini stepper has a larger contact area with the ground, so
that the weight of the user is distributed from the mini stepper to the ground
15 evenly and smoothly, thereby increasing the lifetime of the mini stepper.

A further objective of the present invention is to provide a mini
stepper, wherein the support rack is detachably mounted on the base without
having to combine the support rack with the base by soldering, thereby
enhancing the aesthetic quality of the mini stepper, and thereby reducing the
20 procedure of fabrication.

A further objective of the present invention is to provide a mini stepper, wherein the support rack is detachably mounted on the base, thereby facilitating storage, package and transportation of the mini stepper.

5 A further objective of the present invention is to provide a mini stepper, wherein the sharp end of the fitting portion of the base is covered by the mounting portion of the support rack, so that the user can operate the mini stepper safely.

In accordance with the present invention, there is provided a mini stepper, comprising:

- 10 a base;
- a shaft tube having a first end secured on a first end of the base; and
- a support rack detachably mounted on a second end of the base.

Further benefits and advantages of the present invention will become apparent after a careful reading of the detailed description with appropriate

15 reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of a mini stepper in accordance with the preferred embodiment of the present invention;

Fig. 2 is an exploded perspective view of the mini stepper in

20 accordance with the preferred embodiment of the present invention;

Fig. 3 is a perspective view of a support rack of the mini stepper in accordance with the preferred embodiment of the present invention;

Fig. 4 is a side plan view of the mini stepper as shown in Fig. 1;

Fig. 5 is a bottom plan view of the mini stepper as shown in Fig. 1;

and

Fig. 6 is a perspective view of a conventional mini stepper in

5 accordance with the prior art.

DETAILED DESCRIPTION OF THE INVENTION

Referring to the drawings and initially to Figs. 1-4, a mini stepper in accordance with the preferred embodiment of the present invention comprises a base 12, a shaft tube 11 having a first end secured on a first end of the base 12, a support rack 21 detachably mounted on a second end of the base 12, two pedals 10 each having a first end pivotally mounted on a second end of the shaft tube 11, and two hydraulic mechanisms 13 each having a first end pivotally mounted on the first end of the base 12 and a second end pivotally mounted on a second end of a respective one of the two pedals 10.

15 The second end of the base 12 is formed with a fitting portion 14, and the support rack 21 has a first end formed with a hollow mounting portion 210 detachably mounted on the fitting portion 14 of the base 12 and has a second end formed with a substantially V-shaped extension 211. The extension 211 of the support rack 21 is an arcuate concave body and is extended outward from the mounting portion 210 of the support rack 21 in an oblique downward manner.

The mini stepper further comprises a support member 20 mounted on a connection of the first end of the shaft tube 11 and the first end of the base 12.

The support member 20 has a center formed with an arcuate mounting portion 22 mounted on the first end of the shaft tube 11. The mounting portion 22 of the support member 20 has a periphery formed with two radially opposite stands 24. Preferably, each of the two stands 24 of the support member 20 is arc-shaped, and is extended outward from the mounting portion 22 of the support member 20 in an oblique downward manner.

As shown in Figs. 4 and 5, the extension 211 of the support rack 21 is extended outward from the mounting portion 210 of the support rack 21 in an oblique downward manner, and each of the two stands 24 of the support member 20 is extended outward from the mounting portion 22 of the support member 20 in an oblique downward manner, thereby increasing the contact area of the mini stepper with the ground, so that the mini stepper is supported on the ground rigidly and stably, thereby facilitating the user operating the mini stepper. In addition, the mini stepper has a larger contact area with the ground, so that the weight of the user is distributed from the mini stepper to the ground evenly and smoothly, thereby increasing the lifetime of the mini stepper. Further, the support rack 21 is detachably mounted on the base 12 without having to combine the support rack 21 with the base 12 by soldering, thereby enhancing the aesthetic quality of the mini stepper, and thereby reducing the procedure of fabrication. Further, the support rack 21 is detachably mounted on

the base 12, thereby facilitating storage, package and transportation of the mini stepper. Further, the sharp end of the fitting portion 14 of the base 12 is covered by the mounting portion 210 of the support rack 21, so that the user can operate the mini stepper safely.

5 Although the invention has been explained in relation to its preferred embodiment(s) as mentioned above, it is to be understood that many other possible modifications and variations can be made without departing from the scope of the present invention. It is, therefore, contemplated that the appended claim or claims will cover such modifications and variations that fall within the
10 true scope of the invention.